

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S35 0	8	((noise adj cancel\$6) and averag\$3 and correlat\$3).clm.	US-PGPUB	OR	OFF	2007/03/12 13:05
S34 9	31	((noise adj cancel\$6) and averag\$3 ).clm.	US-PGPUB	OR	OFF	2007/03/12 13:07
S35 1	961	(pixel near3 averag\$3 ).clm.	US-PGPUB	OR	OFF	2007/03/12 13:07
S35 2	120	(pixel near3 averag\$3 and noise).clm.	US-PGPUB	OR	OFF	2007/03/12 13:07
S35 3	50	((pixel near3 averag\$3) same noise).clm.	US-PGPUB	OR	OFF	2007/03/12 13:07
S35 4	10	(capacit\$5 same averag\$4 same noise).clm.	US-PGPUB	OR	OFF	2007/03/12 13:09
S35 5	201	(capacit\$5 and averag\$4 and noise).clm.	US-PGPUB	OR	OFF	2007/03/12 13:09

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S17 0	1	10/055901	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S17 3	236	Kokubun.in. "udo.in" "tsuchiya.in"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S17 5	4468	(Kokubun.in. "udo.in" "tsuchiya.in" yamamoto.in. funakoshi.in.) and fujitsu.as.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S17 6	137	(Kokubun.in. "udo.in" "tsuchiya.in" funakoshi.in.) and fujitsu.as.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S17 7	18	(Kokubun.in. "udo.in" "tsuchiya.in" yamamoto.in. funakoshi.in.) and fujitsu.as. and x-y	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S17 9	6581	pixel near1 averag\$3	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S18 0	2024	pixel near1 averag\$3 and capacit\$5	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S18 1	66	pixel near1 averag\$3 and capacit\$5 and noise and cds	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S18 2	39	pixel near1 averag\$3 and (capacitor\$1 capacitance) and noise and cds	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S18 3	35	pixel near1 averag\$3 and (capacitor\$1 capacitence) and noise and cds	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S18 4	39	S182 S183	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S18 5	39	S182 and S184	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S18 6	1191	pixel near1 averag\$3 and capacit\$5 and vertical and horizontal	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S18 7	1000	pixel near1 averag\$3 and capacit\$5 and vertical and horizontal and (array matrix)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S18 8	45	pixel near1 averag\$3 and capacit\$5 and vertical and horizontal and (array matrix) and cds	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18

## EAST Search History

S18 9	1	"5926214".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S19 0	44	"5926214"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S19 1	0	0616464A2	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S19 2	0	WO0616464A2	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S19 3	0	WO adj "0616464" adj A2	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S19 4	0	"0616464" adj A2	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S19 5	1	"616464" adj A2	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S19 6	1	"09247535"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S19 7	16	oba adj hidefumi	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S19 8	0	ueno adj isamu and mamoru adj miyawaki	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S19 9	21	ueno near1 isamu and miyawaki near1 mamoru	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S20 0	139	combin\$3 near2 signal near2 pixel	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S20 1	70	combin\$3 near2 signal near2 pixel and averag\$3	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S20 2	31	combin\$3 near2 signal near2 pixel and averag\$3 and capacit\$5	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S20 3	500	(block adj averag\$3) same pixel\$1	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18

## EAST Search History

S20 4	157	(block adj averag\$3) same pixel\$1 and capacit\$5	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S20 5	75	(block adj averag\$3) same pixel\$1 and capacit\$5 and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S20 6	11	(block adj averag\$3) same pixel\$1 and capacitor\$1 and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S20 7	46	(programmable adj Multiresolution adj CMOS adj Active adj Pixel adj Sensor)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S20 8	6	(programmable adj Multiresolution adj CMOS adj Active adj Pixel adj Sensor) and averag\$3	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S20 9	0	psuedo\$1binning	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S21 0	0	psuedo-binning	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S21 1	0	psuedo adj binning	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S21 2	6	psuedo adj bin\$4	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S21 3	21	psuedo\$1bin\$6	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S21 4	550	pseudo\$1bin\$6	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S21 5	1	pseudo\$1binning	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S21 6	403	(Signal adj Averaging) same (pixel image)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S21 7	141	(Signal adj Averaging) same (pixel image) and (capacit\$4 floating)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S21 8	16	(Signal adj Averaging) same (pixel image) same (capacit\$4 floating)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18

## EAST Search History

S21 9	0	"5949483".pn. and "746"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S22 0	66	"5949483"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S22 1	1	"5949483" and crossbar	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S22 2	1	"5949483" and "718"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S22 3	0	"5949483" and "718\$1"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S22 4	1	"5949483".pn. and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S22 5	1	"6693670".pn. and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S22 6	1	"5773832".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S22 7	1	"5970115".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S22 8	1	"5262871".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S22 9	1	"6794627".pn. and averag\$3	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S23 0	0	"5867045".pn. and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S23 1	1	"5969758".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S23 2	1514	348/308	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S23 3	303	348/308 and averag\$4	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18

## EAST Search History

S23 4	236	Kokubun.in. "udo.in" "tsuchiya.in"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S23 5	42	(Kokubun.in. "udo.in" "tsuchiya.in") and fujitsu.as.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S23 6	4468	(Kokubun.in. "udo.in" "tsuchiya.in" yamamoto.in. funakoshi.in.) and fujitsu.as.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S23 7	137	(Kokubun.in. "udo.in" "tsuchiya.in" funakoshi.in.) and fujitsu.as.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S23 8	132	(Kokubun.in. "udo.in" "tsuchiya.in" yamamoto.in. funakoshi.in.) and fujitsu.as. and averag\$4	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S23 9	6581	pixel near1 averag\$3	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S24 0	2024	pixel near1 averag\$3 and capacit\$5	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S24 1	39	pixel near1 averag\$3 and (capacitor\$1 capacitance) and noise and cds	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S24 2	35	pixel near1 averag\$3 and (capacitor\$1 capacitence) and noise and cds	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S24 3	39	S241 S242	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S24 4	39	S241 and S243	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S24 5	1191	pixel near1 averag\$3 and capacit\$5 and vertical and horizontal	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S24 6	1000	pixel near1 averag\$3 and capacit\$5 and vertical and horizontal and (array matrix)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S24 7	45	pixel near1 averag\$3 and capacit\$5 and vertical and horizontal and (array matrix) and cds	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S24 8	58	pixel near1 averag\$3 and capacit\$5 and vertical and horizontal and (array matrix) and correlated adj double	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18

## EAST Search History

S24 9	0	0616464A2	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S25 0	0	WO0616464A2	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S25 1	0	WO adj "0616464" adj A2	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S25 2	0	"0616464" adj A2	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S25 3	0	ueno adj isamu and mamoru adj miyawaki	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S25 4	139	combin\$3 near2 signal near2 pixel	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S25 5	70	combin\$3 near2 signal near2 pixel and averag\$3	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S25 6	500	(block adj averag\$3) same pixel\$1	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S25 7	157	(block adj averag\$3) same pixel\$1 and capacit\$5	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S25 8	0	psuedo\$1binning	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S25 9	0	psuedo-binning	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S26 0	0	psuedo adj binning	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S26 1	550	pseudo\$1bin\$6	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S26 2	403	(Signal adj Averaging) same (pixel image)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S26 3	141	(Signal adj Averaging) same (pixel image) and (capacit\$4 floating)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18

## EAST Search History

S26 4	0	"5949483".pn. and "746"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S26 5	1	"5949483" and "718"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S26 6	0	"5949483" and "718\$1"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S26 7	0	"5867045".pn. and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S26 8	1	10/055901	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S26 9	1	"5926214".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S27 0	1	"616464" adj A2	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S27 1	1	"09247535"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S27 2	1	pseudo\$1binning	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S27 3	1	"5949483" and crossbar	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S27 4	1	"5949483".pn. and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S27 5	1	"6693670".pn. and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S27 6	1	"5773832".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S27 7	1	"5970115".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S27 8	1	"5262871".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18

## EAST Search History

S27 9	1	"6794627".pn. and averag\$3	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S28 0	1	"5969758".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S28 1	18	(Kokubun.in. "udo.in" "tsuchiya.in" yamamoto.in. funakoshi.in.) and fujitsu.as. and x-y	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S28 2	66	pixel near1 averag\$3 and capacit\$5 and noise and cds	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S28 3	44	"5926214"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S28 4	16	oba adj hidefumi	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S28 5	21	ueno near1 isamu and miyawaki near1 mamoru	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S28 6	31	combin\$3 near2 signal near2 pixel and averag\$3 and capacit\$5	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S28 7	75	(block adj averag\$3) same pixel\$1 and capacit\$5 and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S28 8	11	(block adj averag\$3) same pixel\$1 and capacitor\$1 and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S28 9	46	(programmable adj Multiresolution adj CMOS adj Active adj Pixel adj Sensor)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S29 0	6	(programmable adj Multiresolution adj CMOS adj Active adj Pixel adj Sensor) and averag\$3	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S29 1	6	psuedo adj bin\$4	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S29 2	21	psuedo\$1bin\$6	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S29 3	16	(Signal adj Averaging) same (pixel image) same (capacit\$4 floating)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18

## EAST Search History

S29 4	66	"5949483"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S29 5	58	pixel near1 averag\$3 and capacit\$5 and vertical and horizontal and (array matrix) and correlated adj double	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S29 6	413	super\$1pixel\$1	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S29 7	72	super\$1pixel\$1 and "348"/\$6	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S29 8	212	348/230.1	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S30 0	1638	250/208.1 and averag\$4	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S30 1	988	250/208.1 and averag\$4 and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S30 2	21	(US-20020106129-\$ or US-20020154347-\$ or US-20020158974-\$ or US-20020158982-\$ or US-20020186312-\$).did. or (US-6914631-\$ or US-6943838-\$ or US-5867045-\$ or US-6166367-\$ or US-5949483-\$ or US-5926214-\$ or US-6693670-\$ or US-6519371-\$ or US-5663555-\$ or US-6697108-\$ or US-6933973-\$ or US-6801258-\$ or US-5970115-\$ or US-6452153-\$ or US-6759641-\$ or US-6794627-\$). did. or (EP-616464-\$ or EP-1253776-\$).did. or (JP-09247535-\$).did.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S30 3	21	S302	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S30 4	17	S302 and (noise SNR)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S30 5	4641	pixel and noise and (averag\$3 near3 signal\$1)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18

## EAST Search History

S30 6	278	pixel and (noise same cancel\$6) and (averag\$3 near3 signal\$1)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S30 7	63	("5949483").URPN.	USPAT	OR	OFF	2007/03/12 07:18
S30 8	49	S307 and noise	USPAT	OR	OFF	2007/03/12 07:18
S30 9	20	S307 and noise and averag\$4	USPAT	OR	OFF	2007/03/12 07:18
S31 0	12	("4323925"   "5315101"   "5464984"   "5485204"   "5576760"   "5877501"   "5901254"   "5949483"   "6005911"   "6552319"   "6573507"   "6956605").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/12 07:18
S31 1	44	((pixel near3 binning)(pixel\$1binning)) and CDS	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/12 07:18
S31 2	20	((pixel near3 binning)(pixel\$1binning)) and CDS and averag\$4	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/12 07:18
S31 3	323	((super adj pixel\$1) (super\$1pixel\$1)) and averag\$3	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/12 07:18
S31 4	147	((super adj pixel\$1) (super\$1pixel\$1)) and averag\$3 and noise	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/12 07:18
S31 5	58	((super adj pixel\$1) (super\$1pixel\$1)) and averag\$3 same noise	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/12 07:18
S31 6	12	((super adj pixel\$1) (super\$1pixel\$1)) and averag\$3 and CDS	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/12 07:18
S31 7	14	((super adj pixel\$1) (super\$1pixel\$1)) and averag\$3 and (double adj sampling)	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/12 07:18
S31 8	12	S317 not S316	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/12 07:18
S31 9	26	((column row) adj averag\$4) and (double adj sampling)	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/12 07:18

## EAST Search History

S32 0	24	(US-20020106129-\$ or US-20020154347-\$ or US-20020158974-\$ or US-20020158982-\$ or US-20020186312-\$ or US-20060108506-\$).did. or (US-6914631-\$ or US-6943838-\$ or US-5867045-\$ or US-6166367-\$ or US-5949483-\$ or US-5926214-\$ or US-6693670-\$ or US-6519371-\$ or US-5663555-\$ or US-6697108-\$ or US-6933973-\$ or US-6801258-\$ or US-5970115-\$ or US-6452153-\$ or US-6759641-\$ or US-6794627-\$ or US-7071980-\$ or US-6590198-\$ or US-6424750-\$ or US-6633029-\$). did. or (EP-616464-\$ or EP-1253776-\$).did. or (JP-09247535-\$).did.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S32 1	6	"6590198" and averag\$3	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S32 2	9	"6424750" and averag\$3	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S32 3	1	"7071980" and averag\$3	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S32 4	0	"7071980" and sampl\$3	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S32 5	0	"7071980" and cds	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S32 6	1	"7071980" and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S32 7	2186	(Active adj pixel adj sensor)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S32 8	735	(Active adj pixel adj sensor) and averag\$4	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S32 9	223	(Active adj pixel adj sensor) and averag\$4 same row	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S33 0	32	(Active adj pixel adj sensor) and averag\$4 same row and cds	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18

## EAST Search History

S33 1	20	cds and sauer.in.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S33 2	6	("5663555" "5920345" "5926214" "5949483" "5969758" "6590198").PN.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:18
S33 3	30	(US-20020106129-\$ or US-20020158974-\$ or US-20020186312-\$ or US-20020154347-\$ or US-20060108506-\$ or US-20020158982-\$).did. or (US-6166367-\$ or US-5949483-\$ or US-6943838-\$ or US-6914631-\$ or US-6633029-\$ or US-5663555-\$ or US-5970115-\$ or US-7071980-\$ or US-6794627-\$ or US-6590198-\$ or US-6759641-\$ or US-6697108-\$ or US-6452153-\$ or US-5867045-\$ or US-6693670-\$ or US-5926214-\$ or US-6424750-\$ or US-5920345-\$ or US-6933973-\$ or US-6801258-\$ or US-6519371-\$).did. or (EP-1253776-\$ or EP-616464-\$).did. or (JP-09247535-\$).did.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:24
S13 5	181	348/230.1	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:25
S17 1	1514	348/308	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:25
S33 4	212	348/230.1	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:25
S33 5	1004	348/308.ccls.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:25
S17 2	303	348/308 and averag\$4	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:26
S29 9	78	348/230.1 and averag\$4	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:26
S33 6	78	348/230.1 and averag\$4	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:26
S17 4	42	(Kokubun.in. "udo.in" "tsuchiya.in") and fujitsu.as.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:27

## EAST Search History

S17 8	132	(Kokubun.in. "udo.in" "tsuchiya.in" yamamoto.in. funakoshi.in.) and fujitsu.as. and averag\$4	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:27
S33 7	303	348/308 and averag\$4	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:27
S33 8	42	(Kokubun.in. "udo.in" "tsuchiya.in") and fujitsu.as.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:27
S33 9	132	(Kokubun.in. "udo.in" "tsuchiya.in" yamamoto.in. funakoshi.in.) and fujitsu.as. and averag\$4	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:27
S34 0	253	348/308 and averag\$4 and capacit\$6	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:27
S34 1	164	348/308.ccls. and averag\$4 and capacit\$6	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:28
S34 2	19	348/230.1.ccls. and averag\$4 and capacit\$6	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:57
S34 3	147	348/241.ccls. and averag\$4 and capacit\$6	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 07:59
S34 4	43	348/241.ccls. and averag\$4 same capacit\$6	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 08:01
S34 5	12	348/241.ccls. and binning	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 08:02
S34 6	12	348/241.ccls. and binning and noise	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 08:02
S1	1	10/055901	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 11:47
S34 8	9	("20020139921"   "20020154347"   "20030193580"   "20040246354"   "5949483"   "6222175"   "6377304"   "6421085"   "6850278").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/12 13:03
S35 0	8	((noise adj cancel\$6) and averag\$3 and correlat\$3).clm.	US-PGPUB	OR	OFF	2007/03/12 13:05
S34 9	31	((noise adj cancel\$6) and averag\$3 ).clm.	US-PGPUB	OR	OFF	2007/03/12 13:07
S35 1	961	(pixel near3 averag\$3 ).clm.	US-PGPUB	OR	OFF	2007/03/12 13:07

## EAST Search History

S35 2	120	(pixel near3 averag\$3 and noise). clm.	US-PGPUB	OR	OFF	2007/03/12 13:07
S35 3	50	((pixel near3 averag\$3) same noise).clm.	US-PGPUB	OR	OFF	2007/03/12 13:07
S35 4	10	(capacit\$5 same averag\$4 same noise).clm.	US-PGPUB	OR	OFF	2007/03/12 13:09
S35 5	201	(capacit\$5 and averag\$4 and noise).clm.	US-PGPUB	OR	OFF	2007/03/12 13:09
S34 7	1	2004/0246354	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 13:19
S35 6	0	yang.in. and hannett.xa.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 13:30
S35 7	1	10/454913	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 13:32
S35 8	7	("20030133625")("5949483" "59658 71" "6366320" "6486912" "6693270  "6888568").PN.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/03/12 13:32